

SOCIOLOGICAL ASPECTS OF HOUSING

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Infant mortality is twice as great in homes without bathtubs, although the infants do not use them, and increases with lower rentals. Housing is also not to be separated from typhoid and respiratory disease. Health, education, standards, inspection, control of rent profiteering and a living wage are health factors related to housing.

ACCORDING to the lexicographer: "A house is a place of abode or shelter, a structure designed as a habitation; specifically, a building intended as a home or place of work for human beings."

From this definition it is evident that housing is not to be considered merely as a form of shelter against the ravages of the elements, but must be thought of in so far as it fulfills its purpose of serving as a home or place of work for thinking, active, living human beings. We are prone to overlook this phase of housing which is conducive to the development of normal family life.

During the war various schemes for housing were proposed, many of which were lacking in a recognition of the fact that many beings were to live within the confines of the hastily erected structures. At the conclusion of the armistice, most of these larger and more intelligent plans were discontinued, so the possibility of wholesale constructions were not realized. Since the armistice, the housing situation has been more acute; and as a result, careful attention to housing sanitation and hygiene has woefully declined.

While it is true that standards of house construction have been rising during the past decade or two, and that building laws have become more stringent, there are still no adequate standards by virtue of which rents may be gauged.

The needs of protection against fire hazards, as well as the necessity for adequate air space and lighting, are matters well understood. In spite of the present information and the moderately developed degree of regulation, the housing situation is generally unsatisfactory from the standpoint of public health.

By many it would be claimed that housing conditions exist by reason of the working of the economic law of supply and demand, but this is insufficient to justify the existence of housing conditions inimicable to public welfare. As a matter of fact, housing conditions are largely determined by family income, and the problem is the same, whether under rural or urban conditions. If criticism is to be leveled against any particular form of housing, it must be most severe upon urban conditions where the coöperative interests increase the need for better living conditions. The isolation of houses in rural communities may threaten the health of the individual occupant, but in a sense it serves as a safeguard to those who are almost too remote to be regarded as neighbors. Even under these conditions, however, the matter of income determines whether the house and barn are to be practically under one roof, and as to whether out-houses and wells shall exist which are a source of danger.

In urban sections, whether one dis-

cusses detached houses or tenements, the character of the dwellings may be judged by the rent paid, and this in turn reflects the character of the income of the occupants. It is true that the relation of houses to parks and playgrounds, industrial centers, noisy or smoky areas; or their proximity to districts given over, willingly or unwillingly, to vice and crime, help to determine the rental value. These and numerous other factors, however, enter into the public health aspect of housing, and determine in part the healthfulness of the neighborhood.

It is unnecessary to cite an array of figures to demonstrate that homes vary with income. The amount of money to be given over to the provision of shelter is affected by the size of the family and the size of the income. In general, it may be said that the larger the family, the larger the percentage of income paid out for rent. It is equally true that the lower the amount of the income the higher percentage of it is spent for rent.

The matter of location, the type of house, whether old or new, the variation in the number of rooms, are not as significant in the determination of housing costs as the possibility of running water, running hot water, toilet facilities, and bath and heat. As an illustration of this, I am quoting the figures of D. W. Ogburn, *Monthly Labor Review*, September, 1919; taking as a basis five-room apartments. Those with bath and running water, but no heat, vary in cost from \$13.00 to \$32.29 per month; those with water but no bath or heat, from \$9.02 to \$15.12; those with no bath or heat, but with running water, \$8.50.

The desire for a comfortable and sanitary home is normal to all save a negligible portion of the community, but the ability to secure healthful housing conditions is limited by the income. It may be said that housing is a commercial problem and that landlords cannot provide the types of dwellings desired without the ability of the tenant to give

an adequate return upon the investment. There are ample data available from the experiences of philanthropic self-supporting building associations to indicate that a reasonable return upon investment is compatible with the erection and maintenance of sanitary, hygienic, modernized dwellings.

From the broadest viewpoint of public health, the state of the family income should not be permitted to jeopardize communal welfare. The financial weakness should not be penalized by a further impoverishment, that of health. The interests and health needs of the community should serve as a powerful force to bring about a finer type of housing than has thus far been developed for the masses. The relation of housing to health comprises various factors influencing the physical, mental and moral development of the family and family life. Whatever benefits each unit of family inures to the advantage of the public. Housing is not to be regarded as a simple matter of personal selection but its minimal standards should be an item of public concern. In its broadest sociological aspect, housing is a determinant of personal, family and communal health.

I admit at once that no agency can determine what rental is to be paid, for this is a matter of arrangement between landlord and tenant, principally landlord. I also grant that there are numerous laws, ordinances and regulations governing houses with a view to securing health and safety, but they are unfortunately more distinguished in the breach than in the observance.

It is patent that from the physical standpoint housing problems include air, light and heat, ventilation, bathing and toilet facilities, sewage disposal and protection from fire hazards; but the question of insects and rodents, modern plumbing, proper protection against the elements and the numerous subsidiary factors growing out of an intimate rela-

tion to them should not be deemed unimportant.

Mental health finds itself threatened by congestion, lack of privacy, impaired opportunity for home study, and the crowding of family life, with the numerous strains due to faulty physical surroundings. The moral health of a community merits greater attention than has been given, and is closely linked up with problems of room congestion, darkness, dampness, a lack of bathing and toilet facilities and the general unattractiveness so common in the homes and dwellings of those with limited income.

The influence of housing upon public health is manifested in the infant mortality question. As has been said, the house and home is largely determined by the income of the tenant and his ability to pay for hygienic surroundings. Some evidence as to the effect of housing upon infant mortality may be found from figures authorized by the Children's Bureau.

In Manchester, N. H., the mortality rate on the basis of rental was as follows:

175 babies.	Less than \$7.50.....	211.4
703 babies.	\$ 7.50 to \$12.49.....	172.1
300 babies.	12.50 to 17.49.....	156.7
62 babies.	Over \$17.50	100.0
168 babies.	Homes owned	86.0

The infant mortality decreases as rental increases. I recognize, of course, that there are other factors beside housing which enter into the mortality rate. In Johnstown, Pa., the infant mortality in homes with bathtubs was 72.6, and without bathtubs, 164.8. The number of rooms in the home relates itself to overcrowding. The greater the room congestion, the lower the standard of living; and, one may generally deduce a relatively lower wage. In Manchester, with less than one person per room, the infant mortality rate was 123.3. With one to two persons per room, the rate was 177.8, and with two to three per room it was 261.7. Lest it be urged that this is a

condition which does not obtain in communities where higher wages are paid, it may be pointed out that in Brockton, Mass., where high wages exist, the infant mortality rate, where less than one person was found to the room, was 86.5, and where there was more than one person per room, 110.2.

Osler refers to tuberculosis as the house disease. Williamson, in the *British Journal of Tuberculosis*, 1915, commented upon the fact that 60 to 70 per cent of tuberculous persons came from houses of three rooms or less, and that the number of cases was larger in two-room houses than in three-room houses, and larger in one-room houses than in two-room houses.

House over-crowding is difficult to deal with, because, as Porter remarks in his *Elements of Hygiene and Public Health*, "It is the poor who overcrowd, and they only do so because they have not the means to pay for real and proper accommodations. Amongst the conditions associated with overcrowding are anemia, rickets, tuberculosis and probably other infectious diseases, since the resistance of persons exposed to overcrowding is apt to be reduced, either on account of it or of the attendant poverty."

The influence of crowds upon contagious diseases is fully appreciated, and administrative success in lessening the spread of contagion, requires an elevation of the standards of living, which includes better housing. In the words of Rosenau, "In addition to raising the standard of living, better houses diminish the chances of contact infection, afford better air and more sunshine, and tend generally to the well-being and uplift of mankind."

The problems of typhoid fever, malaria, plague, and venereal diseases are certainly not to be disassociated from housing questions.

The control of pneumonia and influenza and various other respiratory dis-

eases, involves problems of house sanitation in no small degree.

By some it is believed that there are places in which cancer is more likely to occur, although the evidence in this direction is unconvincing. Even the statement of Watkins-Pitchford that "Cancer houses usually appear to be unwholesome dwellings, often affording special facilities in their immediate neighborhood for the irradiation of their anemic inhabitants," is open to question.

From the standpoint of society, the improvement of housing calls for serious consideration; not merely as a part of the general plan for allaying economic unrest and the discontent now rampant, but also as a measure of promoting a higher degree of physical welfare in the community. It appears to be necessary to secure a more effective enforcement of health laws dealing with buildings to be utilized for living purposes. It would appear to be desirable to establish regulations to ensure the development of minimal standards of housing based upon the health needs, as determined by modern knowledge concerning the relation of housing to public health.

Raising the standards for home making is being attempted through various educational agencies and devices, but the obstacles to obtaining the desired results are numerous. Habits of cleanliness are difficult to instill with the absence of running water and home toilets. It is difficult to secure coöperation in matters of open windows if the possibilities of heating are insufficient, particularly when there are infants in the household. The possibility of home nursing is greatly lessened when room congestion exists and privacy is impossible. The seriousness of this is accentuated by the impossibility of providing hospital care for all who, for home reasons, require it. Administrative attacks upon rodents, bed-bugs, and pediculosis are greatly handicapped when the tenants cannot be held responsible for the conditions leading to their presence in large num-

ber, despite all efforts at cleanliness and control.

It is time that the mental and moral effects of housing problems received their full measure of study. The influence of these conditions is more usually manifest at the time of epidemics when the problem of communal psychology assumes unusual proportions. Physical health and freedom from preventable disease are in part determined by the maintenance of a high degree of what is so generally spoken of as "morale." Housing morale is not a negligible factor.

It is patent that housing is a primary need, and, as such, is of paramount importance. To improve housing conditions is to influence the standards of living favorably. Higher standards of living, in turn, advance public welfare and decrease physical and mental defects and diseases and raise the moral qualities essential for effective citizenship. Poor housing breeds disease and crime; disease and crime lower potentially earning capacity, with consequent inability to pay for hygienic surroundings; thus a vicious circle is established.

In order to secure the maximum benefits of housing, several steps are necessary: First, an appreciation of the sociological and health significance of hygienic dwellings; second, the education of the public as to the natural value and importance of sanitary dwellings; third, the rigid enforcement of laws, ordinances and regulations dealing with home construction and house alterations; fourth, the promulgation of minimum standards of housing construction, and particularly the regulation of standards of maintenance and repair; fifth, the establishment of some form of supervision or control that would prevent the exploitation of tenants through profiteering rentals and unwillingness to make necessary repairs required in the interest of family health and safety; sixth, the determination of rules and regulations for proper disinfection and fumigation following the presence of contagious

diseases, when such might prove a source of contagion to a new occupant; seventh, the encouragement of subsidized or non-subsidized programs of housing construction that would make available modern hygienic dwelling places at low rentals; eighth, the support by health departments of those measures tending to increase family incomes so as to bring about a minimum standard of living wage, consistent with the cost of living, in a manner that is conducive to health and comfort.

In dealing with housing, we have passed the stage of theorizing and have entered into a stage of practical performance. The house is no longer to be considered as a place of shelter, but as our definition states, "A building intended as a home or place of work for human beings." In our views upon the subject we have, therefore, aimed to stress the primary ideas which should dominate minds of public health workers—"home" and "human beings."



TRAFFIC REGULATION AS A MEANS OF PREVENTING INJURY AND DEATH FROM STREET VEHICLES

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Mortality in New York City from auto accidents increased 735 per cent in 1917 over previous averages, and 940 per cent in 1918. Figures are duplicated elsewhere. Dr. Byrne urges radical measures of restriction and calls for a campaign for standard regulations with real penalties. He considers education of pedestrians and children very necessary.

When we endeavor to analyze the various causes of sickness and death in the registration area after eliminating those due to old age and prenatal conditions, we are confronted with a considerable number that should be, with proper education and care, preventable. Among these we would call attention to the rapidly increasing number of accidents and deaths due to the operating of street vehicles of all kinds, but, particularly, on account of their large and increasing percentage to those due to the self-propelled type.

With the introduction of every new method of human advancement intended to broaden the activities of everyday life and crowd days of energy into hours,

and miles into feet, we meet with the same result—an unnecessary sacrifice of life and health due to neglect of care, or lack of knowledge, both of the new method and of the dangers to be met at each step forward. While recognizing that dangers must be met and risks must be taken in trying out each new method of shortening space and saving time, we have to admit that comparatively little attention has been given in the past to controlling the action of those who are careless, not only of their own lives and well-being, but who are also criminally neglectful of the health and safety of others.

When, however, we consider the immense advances already made and still